

max. 144 m³/h

ACmaxx axial fans

Series AC 3200 J 92 x 92 x 38 mm



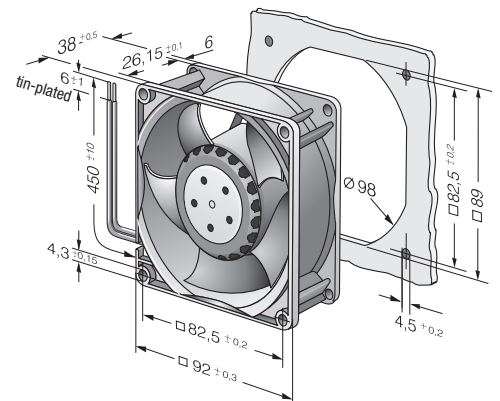
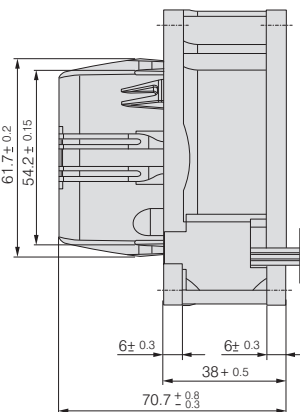
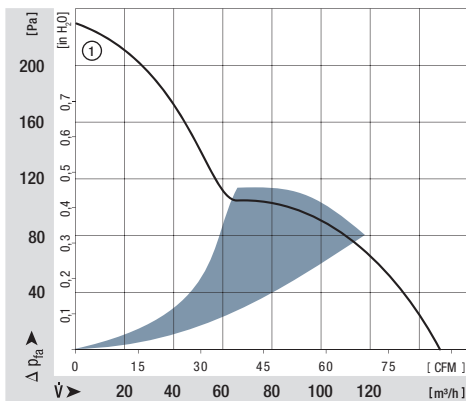
- **Material:** Housing: GRP¹⁾ (PBTP)
Impeller: GRP¹⁾ (PA)
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Clockwise, seen on rotor
 - **Connection:** Via single wires AWG 22, TR 64
 - **Highlights:** Universally usable for all mains voltages between 85 and 265 VAC
 - **Mass:** 325 g
- **Possible special versions:** (See chapter DC fans - specials)
 - Speed signal
 - Go / No-go alarm
 - Alarm with limit speed
 - External temperature sensor
 - Internal temperature sensor
 - PWM control input
 - Analogue control input
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54

1) Fibreglass-reinforced plastic

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Input power | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} |
|--------------|--|-------------------|----------|-----------------|-----------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|
| Type | | m ³ /h | CFM | V | Hz | VAC | dB(A) | Bel(A) | □ / ■ | Watts | rpm | °C | Hours | Hours |
| AC 3200 JH | | 144 | 85 | 115 / 230 | 50 / 60 | 85 ... 265 | 55 | 6,4 | □ / ■ | 12 | 6 800 | -20...+70 | 70 000 / 35 000 | ① |

Subject to alternations

Speed variants available on request.



max. 204 m³/h

ACmaxx axial fans

Series AC 4300 119 x 119 x 32 mm



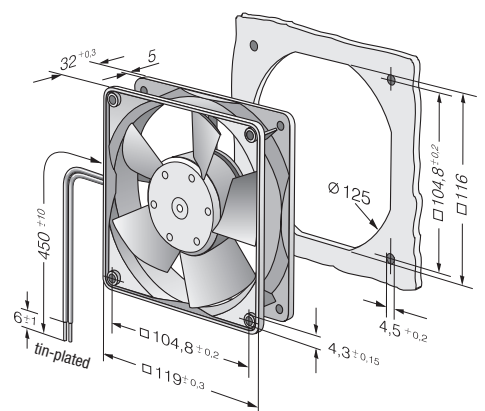
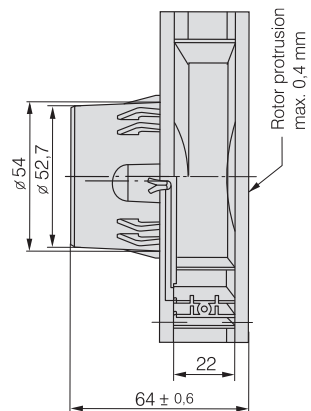
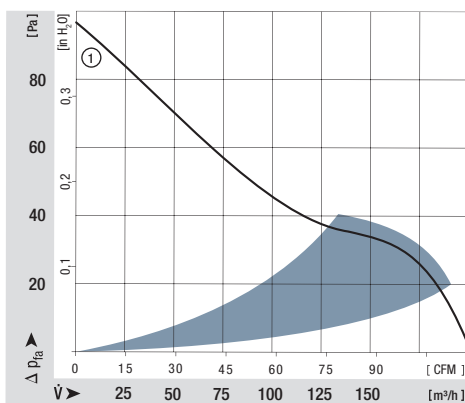
- **Material:** Housing: GRP¹⁾ (PBTP)
Impeller: GRP¹⁾ (PA)
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Clockwise, seen on rotor
 - **Connection:** Via single wires AWG 22, TR 64
 - **Highlights:** Universally usable for all mains voltages between 85 and 265 VAC
 - **Mass:** 325 g
- **Possible special versions:** (See chapter DC fans - specials)
 - Speed signal
 - Go / No-go alarm
 - Alarm with limit speed
 - External temperature sensor
 - Internal temperature sensor
 - PWM control input
 - Analogue control input
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54 / IP 68

1) Fibreglass-reinforced plastic

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Input power | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Kemlinie |
|--------------|--|-------------------|----------|-----------------|-----------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|----------|
| Type | | m ³ /h | CFM | V | Hz | VAC | dB(A) | Bel(A) | □ / ■ | Watts | rpm | °C | Hours | Hours | |
| AC 4300 H | | 204 | 120 | 115 / 230 | 50 / 60 | 85 ... 265 | 51 | 6,4 | □ / ■ | 12 | 3 400 | -20...+70 | 45 000 / 22 500 | | ① |

Subject to alternations

Speed variants available on request.



max. 350 m³/h

ACmaxx axial fans

Series AC 6100 N 172 x 160 x 51 mm



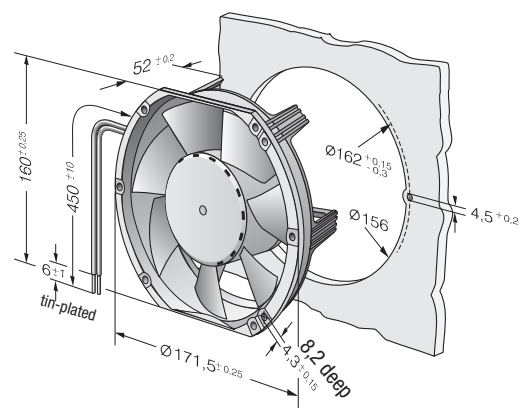
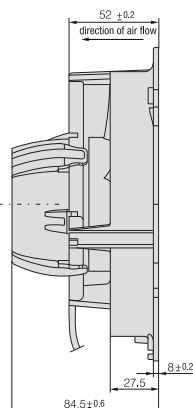
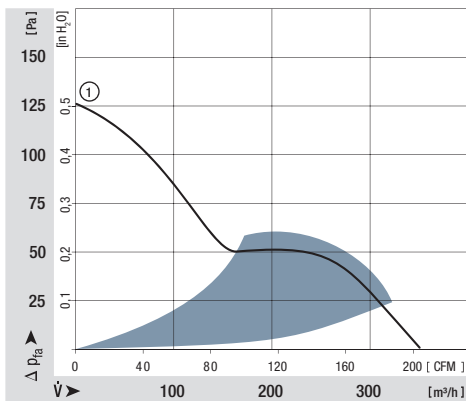
- **Material:** Housing: GRP¹⁾ (PA)
Impeller: GRP¹⁾ (PA)
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Counter clockwise, seen on rotor
 - **Connection:** Via single wires AWG 22, TR 64
 - **Highlights:** Universally usable for all mains voltages between 85 and 265 VAC, 50-60 Hz
 - **Mass:** 760 g
- **Possible special versions:** (See chapter DC fans - specials)
 - Speed signal
 - Go / No-go alarm
 - Alarm with limit speed
 - External temperature sensor
 - Internal temperature sensor
 - PWM control input
 - Analogue control input
 - Protection against moisture

1) Fibreglass-reinforced plastic

| Nominal data | | Air flow | Air flow | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Input power | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|--|-------------------|----------|-----------------|-----------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | | m ³ /h | CFM | V | Hz | VAC | dB(A) | Bel(A) | □ / ■ | Watts | rpm | °C | Hours | Hours | |
| AC 6100 NM | | 350 | 206 | 115 / 230 | 50 / 60 | 85 ... 265 | 52 | 6,1 | □ / ■ | 14 | 2 850 | -20...+70 | 80 000 / 37 500 | | ① |

Subject to alternations

Speed variants available on request.



max. 350 m³/h

ACmaxx axial fans

Series AC 6200 N Ø 172 x 51 mm



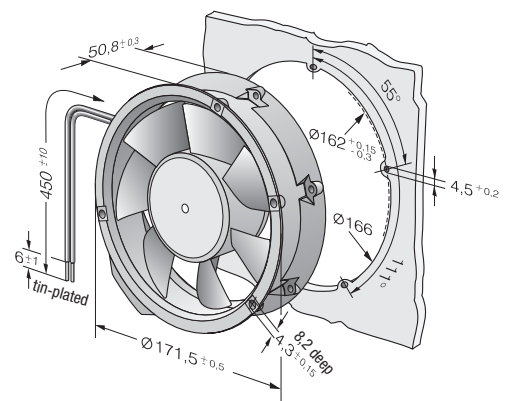
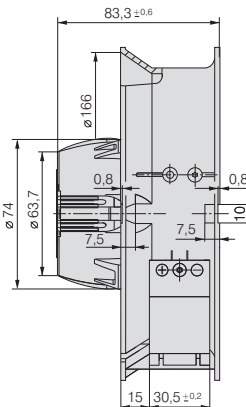
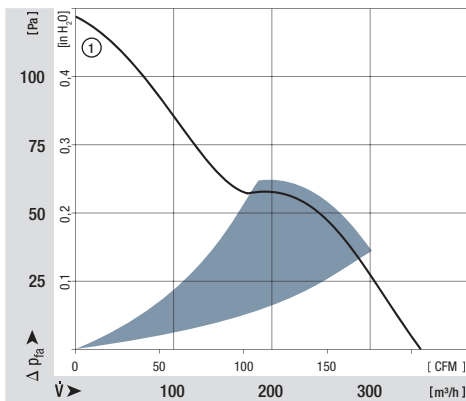
- **Material:** Housing: Die-cast aluminium
Impeller: GRP¹⁾ (PA)
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Counter clockwise, seen on rotor
 - **Connection:** Via single wires AWG 22, TR 64
 - **Highlights:** Universally usable for all mains voltages between 85 and 265 VAC, 50-60 Hz
Housing with grounding lug for screw M4 x 8 (Torx)
 - **Mass:** 900 g
- **Possible special versions:** (See chapter DC fans - specials)
 - Speed signal
 - Go / No-go alarm
 - Alarm with limit speed
 - External temperature sensor
 - Internal temperature sensor
 - PWM control input
 - Analogue control input
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54

1) Fibreglass-reinforced plastic

| Nominal data | Air flow | Air flow | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sintec sleeve bearings Ball bearings | Input power | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|-------------------|----------|-----------------|-----------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | m ³ /h | CFM | V | Hz | VAC | dB(A) | Bel(A) | □ / ■ | Watts | rpm | °C | Hours | Hours | |
| AC 6200 NM | 350 | 206 | 115 / 230 | 50 / 60 | 85 ... 265 | 50 | 5,7 | □ / ■ | 14 | 2 850 | -20...+70 | 80 000 / 40 000 | | ① |

Subject to alternations

Speed variants available on request.



max. 80 m³/h

ACmaxx axial fans

Series AC 8300 H 80 x 80 x 32 mm



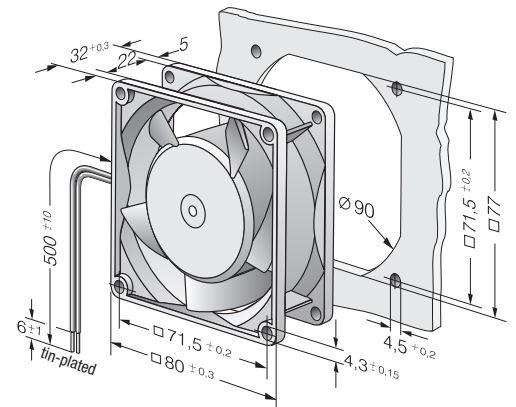
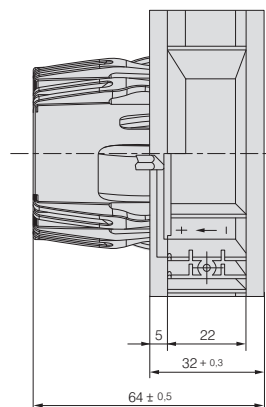
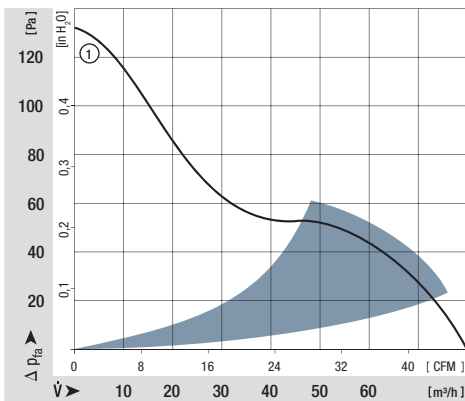
- **Material:** Housing: GRP¹⁾ (PBTP)
Impeller: GRP¹⁾ (PA)
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Clockwise, seen on rotor
 - **Connection:** Via single wires AWG 22, TR 64
 - **Highlights:** Universally usable for all mains voltages between 85 and 265 VAC
 - **Mass:** 325 g
- **Possible special versions:** (See chapter DC fans - specials)
 - Speed signal
 - Go / No-go alarm
 - Alarm with limit speed
 - External temperature sensor
 - Internal temperature sensor
 - PWM control input
 - Analogue control input
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54

1) Fibreglass-reinforced plastic

| Nominal data | Air flow | Air flow | Nominal voltage | Frequency | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Input power | Nominal speed | Temperature range | Service life L ₁₀ at 40 °C | at T _{max} | Curve |
|--------------|-------------------|----------|-----------------|-----------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|---------------------|-------|
| Type | m ³ /h | CFM | V | Hz | VAC | dB(A) | Bel(A) | □ / ■ | Watts | rpm | °C | Hours | Hours | ① |
| AC 8300 H | 80 | 47 | 115 / 230 | 50 / 60 | 85 ... 265 | 48 | 6,2 | □ / ■ | 8,3 | 5 000 | -20...+75 | 55 000 / 25 000 | | ① |

Subject to alternations

Speed variants available on request.



max. 175 m³/h

GreenTech EC-Compact fan axial fans

Series ACi 4400 119 x 119 x 38 mm

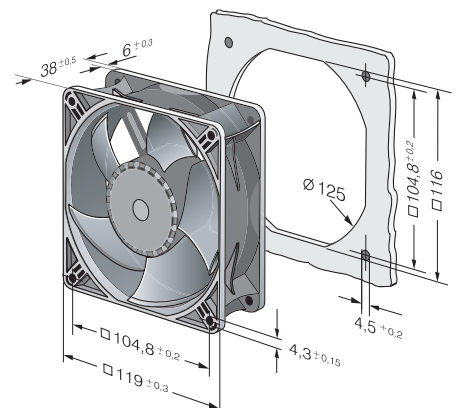
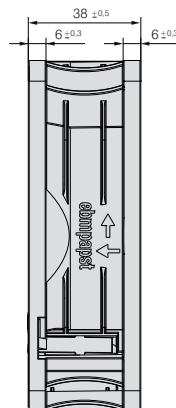
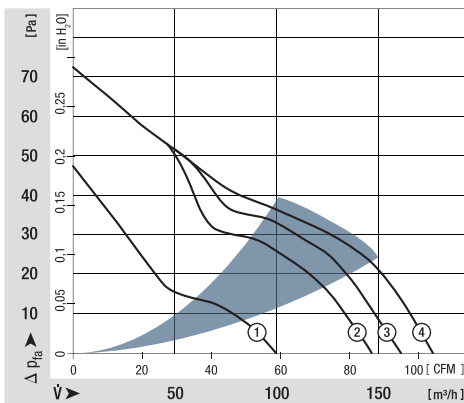


- **Material:** Housing: GRP¹⁾ (PBT)
Impeller: GRP¹⁾ (PA)
 - **Direction of air flow:** Exhaust over struts
 - **Direction of rotation:** Clockwise, seen on rotor
 - **Connection:** via 2 flat plugs 2,8 x 0,5 mm
flying leads optional
 - **Highlights:** Fully integrated converter and fan electronics
 - **Mass:** 250 g
- **Possible special versions:**
(See chapter DC fans - specials)
 - Protection against moisture
 - Protection against salt fog
 - Type of protection: IP 54

1) Fibreglass-reinforced plastic

| Nominal data | Air flow | | Nominal voltage | Voltage range | Sound pressure level | Sound power level | Sinter sleeve bearings Ball bearings | Input power | Nominal speed | Temperature range | Service life L ₁₀ (40 °C) ebm-papst Standard | Service life L ₁₀ (T _{max}) ebm-papst Standard | Life expectancy L ₁₀ IPPC (40 °C) see page 17 | Curve |
|--------------|-------------------|-----|-----------------|---------------|----------------------|-------------------|---|-------------|---------------|-------------------|--|--|---|-------|
| | m ³ /h | CFM | | | | | | | | | | | | |
| ACi 4420 ML | 100 | 59 | 230 | 195...265 | 25 | 4,1 | ■ | 1,4 | 1 850 | -20...+75 | 65 000 / 25 000 | 110 000 | 110 000 | ① |
| ACi 4420 N | 147 | 86 | 230 | 195...265 | 36 | 4,9 | ■ | 2,8 | 2 700 | -20...+75 | 65 000 / 25 000 | 110 000 | 110 000 | ② |
| ACi 4420 H | 160 | 94 | 230 | 195...265 | 39 | 5,1 | ■ | 3,3 | 3 000 | -20...+75 | 65 000 / 25 000 | 110 000 | 110 000 | ③ |
| ACi 4420 HH | 175 | 106 | 230 | 195...265 | 42 | 5,3 | ■ | 4,4 | 3 300 | -20...+75 | 65 000 / 25 000 | 110 000 | 110 000 | ④ |
| ACi 4410 HH | 175 | 106 | 115 | 85...132 | 42 | 5,3 | ■ | 4,4 | 3 300 | -20...+75 | 65 000 / 25 000 | 110 000 | 110 000 | ④ |

Subject to alternations



Product Data Sheet AC 4400 FNNR

ebmpapst

Die Wahl der Ingenieure



AC 4400 FNNR

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1 General

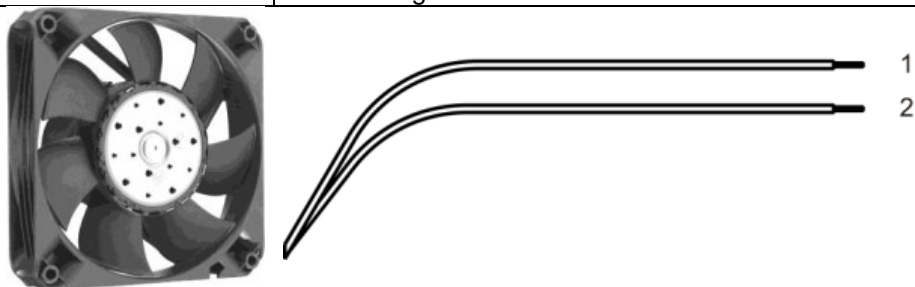
| | |
|---------------------------------------|------------------------|
| Fan type | Fan |
| Rotational direction looking at rotor | counterclockwise |
| Airflow direction | Air outlet over struts |
| Bearing system | Ball bearing |
| Mounting position | any |

2 Mechanics**2.1 General**

| | | |
|-------------------|----------|--|
| Width | 119,0 mm | |
| Height | 119,0 mm | |
| Depth | 58,0 mm | |
| Diameter | 0,0 mm | |
| Weight | 0,370 kg | |
| Housing material | Plastic | |
| Impeller material | Plastic | |

2.2 Connections

| | | |
|-----------------------|-------------|--|
| Electrical connection | Wires | |
| Length of lead wire | L = 450 mm | |
| Tolerance | + - 10,0 mm | |
| Length of tube | S = 15 mm | |
| Tolerance | + - 5 mm | |
| Wire gauge (AWG) | 22 | |
| Insulation diameter | | |
| Plug | see drawing | |
| Contact | see drawing | |



| | Colour | Operation |
|--------|--------|-----------|
| Wire 1 | black | L1 |
| Wire 2 | black | L2 |

3 Operating Data

3.1 Operating Data - Electrical Interface - Input

External voltage supply for input and output signals must be SELV conform.

| | |
|---------------|------|
| Control input | None |
|---------------|------|

3.2 Electrical Operating Data

| Features | Condition | Symbol | Values | | | |
|--------------------------------|----------------|--------|------------------------|------------------------|------------------------|------------------------|
| | | | 85 V | 230 V | 265 V | 115 V |
| Voltage range | $\Delta p = 0$ | U | | | | |
| Nominal voltage | $\Delta p = 0$ | U_N | | 230 V | | |
| Frequency | $\Delta p = 0$ | f | | 50 Hz | | 60 Hz |
| Power consumption Tolerance | $\Delta p = 0$ | P | 12 W +- 15 % | 12 W +- 15 % | 12 W +- 20 % | 12 W +- 20 % |
| Speed Tolerance | $\Delta p = 0$ | n | 4.850 1/min +- 10 % | 4.850 1/min +- 10 % | 4.850 1/min +- 10 % | 4.850 1/min +- 10 % |

3.3 Operating Data - Electrical Interface -Output

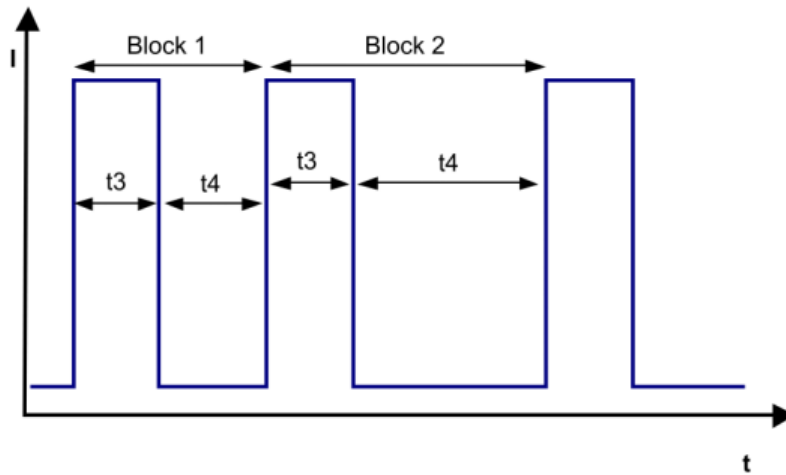
External voltage supply for input and output signals must be SELV conform.

| | |
|------------|------|
| Tacho type | None |
|------------|------|

| | |
|------------|------|
| Alarm type | None |
|------------|------|

3.4 Electrical Features

| | | |
|------------------------------------|------------------------|--|
| Electronic function | None | |
| Locked rotor protection | Auto restart | |
| Clock signal t3/t4 at locked rotor | Typical: 0,25 s / 20 s | |



3.5 Aerodynamic

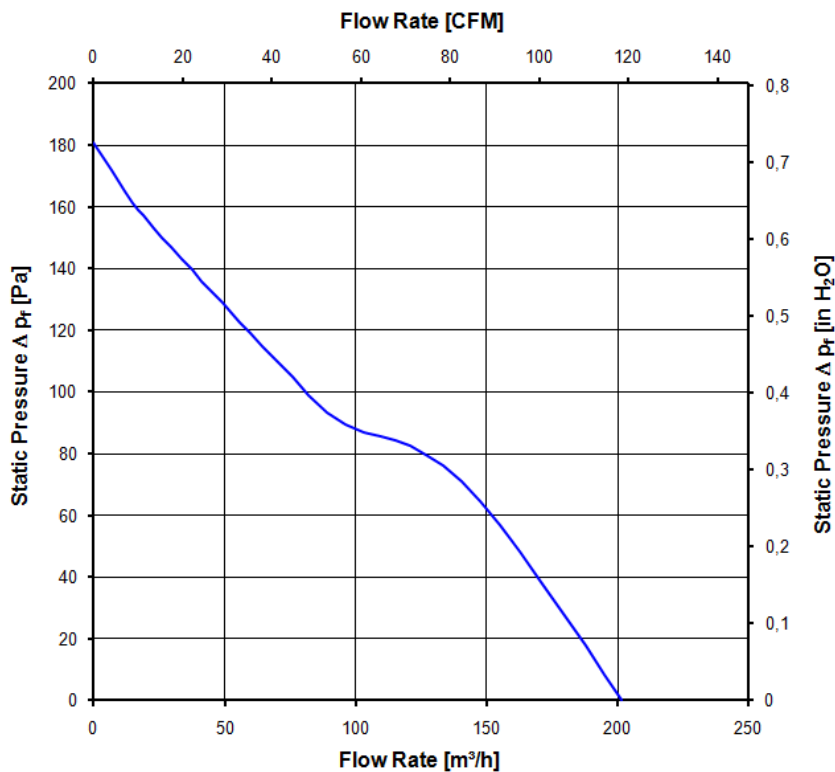
Measurement conditions: Measured with a double chamber intake rig acc. to DIN EN ISO 5801.
 Normal air density = 1,2 kg/m³; Temperature 23°C +/- 3°C;
 In the intake and outlet area should not be any solid obstruction within 0,5 m.
 The information is only valid under the specified test conditions and may be changed by the installation conditions. If there are deviations from the standard test conditions, the characteristic values must be checked under the installed conditions.

a) Operation condition:
 4.850 1/min at free air flow Frequency: 50 Hz Nominal voltage: 230 V

| | |
|---|-----------------------|
| Max. free-air flow ($\Delta p = 0 / \dot{V} = \text{max.}$) | 205 m ³ /h |
| Max. static pressure ($\Delta p = \text{max.} / \dot{V} = 0$) | 168 Pa |

b) Operation condition:
 4.850 1/min at free air flow Frequency: 60 Hz Nominal voltage: 115 V

| | |
|---|-----------------------|
| Max. free-air flow ($\Delta p = 0 / \dot{V} = \text{max.}$) | 205 m ³ /h |
| Max. static pressure ($\Delta p = \text{max.} / \dot{V} = 0$) | 168 Pa |



3.6 Sound Data

Measurement conditions: Sound pressure level: 1 Meter distance between microphone and the air intake.
 Sound power level: Acc. to DIN 45635 part 38 (ISO 10302)
 Measured in a semianchoic chamber with a background noise level of $L_p(A) < 5 \text{ dB}(A)$
 For further measurement conditions see section 3.4

a) Operation condition:
 4.850 1/min at free air flow Frequency: 50 Hz Nominal voltage: 230 V

| | | |
|---|---------------------------------|--|
| Optimal operating point | 128,0 m ³ /h @ 75 Pa | |
| Sound power level at the optimal operating point | 6,2 bel(A) | |
| Sound pressure level at free air flow, measured in rubber bands | 53,0 dB(A) | |

b) Operation condition:
 4.850 1/min at free air flow Frequency: 60 Hz Nominal voltage: 115 V

| | | |
|---|---------------------------------|--|
| Optimal operating point | 128,0 m ³ /h @ 75 Pa | |
| Sound power level at the optimal operating point | 6,2 bel(A) | |
| Sound pressure level at free air flow, measured in rubber bands | 53,0 dB(A) | |

4 Environment

4.1 General

| | | |
|--|--------|--|
| Min. permitted ambient temperature TU min. | -20 °C | |
| Max. permitted ambient temperature TU max. | 70 °C | |
| Min. permitted storage temperature TL min. | -40 °C | |
| Max. permitted storage temperature TL max. | 80 °C | |

4.2 Climatic requirements*)

| | | |
|--------------------------|--|--|
| Humidity requirements | humid heat, constant; according to DIN EN 60068-2-78, 14 days | |
| Water exposure | None | |
| Radiation exposure | None | |
| Dust requirements | None | |
| Salt fog requirements | None | |
| Harmful gas requirements | None | |
| Humidity requirements | humid heat, cyclic; according to DIN EN 60068-2-30, 6 cycle | |
| Water exposure | None | |
| Radiation exposure | None | |
| Dust requirements | Dust check; according to DIN EN 60068-2-68, 6g/m ² d, 1 day | |
| Salt fog requirements | None | |
| Harmful gas requirements | None | |

*) Permitted application area:

The product is intended for use in sheltered rooms with controlled temperature and controlled humidity. Directly exposure to water must be avoided.

Pollution degree 1 (according DIN EN 60664-1)

There is either no pollution or it occurs only dry, non-conductive pollution. The pollution has no negative impact.

5 Safety

5.1 Electrical Safety

A verification of thermal conditions (normal and abnormal operation) as well as the protection against electric shock, ingress of solid foreign objects and water has to be done in conjunction with the appliance.

| | |
|---------------------------|--------------|
| Test voltage HV type test | 1500 V |
| Unit test voltage | VAC |
| Time type test HV | 1 s |
| Insulation resistance | RI > 10 MOhm |
| Protection class | built-in fan |

5.2 Approval Tests

| | | |
|-----|---|-----|
| CE | EC Declaration of Conformity | Yes |
| EAC | Eurasian Conformity | Yes |
| UL | Underwriters Laboratories | Yes |
| VDE | Association for Electrical, Electronic and Information Technologies | Yes |
| CSA | Canadian Standards Association | Yes |
| CCC | China Compulsory Certification | Yes |

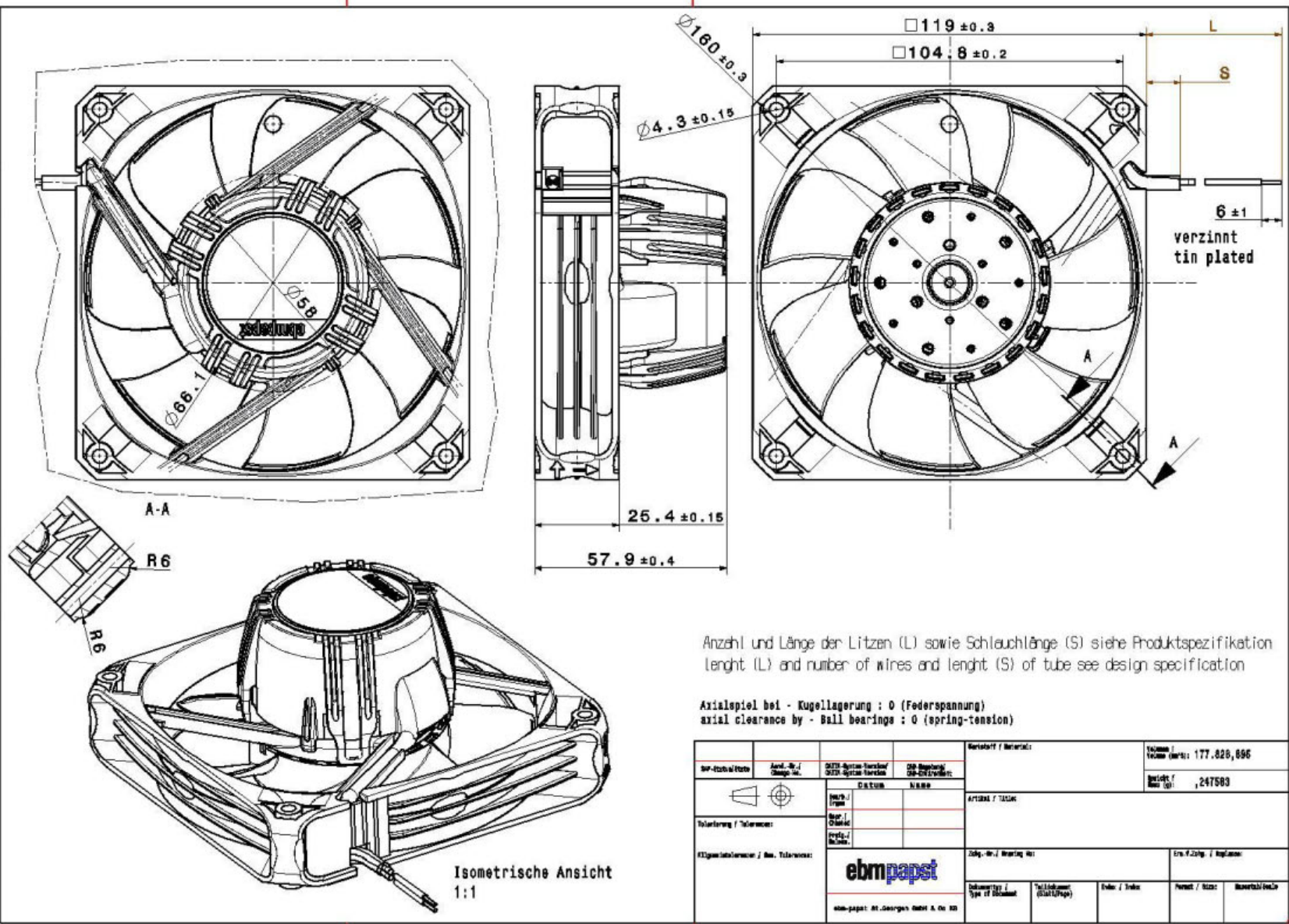
According to the guidelines on the application of Directive 2006/95/EC, chapter III: Scope of the "low voltage" directive, paragraph: Are "components" included in the scope? the following has to be applied:

However, some types of electrical devices, designed and manufactured for being uses as basic components to be incorporated into other electrical equipment, are such that their safety to a very large extent depends on how they are integrated into the final product and the overall characteristics of the final product. These basic components include electronic and certain other components.

Taking into account these objectives of the "Low Voltage" Directive, such basic components, the safety of which can only, to a very large extend, be assessed taking into account, how they are incorporated and for which a risk assessment cannot be undertaken, then they are not covered as such by the Directive. In particular, they must not be CE marked unless covered by other Community legislation that requires CE marking.

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Zeichnungen sind DIN 101 (ISO 101) nachzuhalten. Refer to production rules DIN 101 (ISO 101).



Anzahl und Länge der Litzen (L) sowie Schlauchlänge (S) siehe Produktspezifikation
 length (L) and number of wires and length (S) of tube see design specification

Axialspiel bei - Kugellagerung : 0 (Federspannung)
 axial clearance by - Ball bearings : 0 (spring-tension)

| | | | | | |
|------------------------------|--|--|--|--|--|
| DW-Status | Art.-Nr. / Design No. | DW-System-Veränderung DW-System-Veränderung | DW-System-Veränderung DW-System-Veränderung | Material / Material: | Teilname / Name (part): 177.826.096 |
| Tolerierung / Tolerances: | Datum Name | DW-System-Veränderung DW-System-Veränderung | DW-System-Veränderung DW-System-Veränderung | Artikel / Part: | Gewicht / Weight (g): 247583 |
| Eigenschaften / Features: | DW-System-Veränderung DW-System-Veränderung | DW-System-Veränderung DW-System-Veränderung | DW-System-Veränderung DW-System-Veränderung | Zeichnung / Drawing: | DW-System-Veränderung DW-System-Veränderung |
| | | DW-System-Veränderung DW-System-Veränderung | DW-System-Veränderung DW-System-Veränderung | DW-System-Veränderung DW-System-Veränderung | DW-System-Veränderung DW-System-Veränderung |
| www.papst-at.com | | | | | |

Isometrische Ansicht
 1:1

Product Data Sheet ACi 4420 MLR

ebmpapst

Die Wahl der Ingenieure



ACi 4420 MLR

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 6.1 General 10

1 General

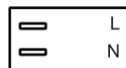
| | |
|---------------------------------------|------------------------|
| Fan type | Fan |
| Rotational direction looking at rotor | clockwise |
| Airflow direction | Air outlet over struts |
| Bearing system | Ball bearing |
| Mounting position | any |

2 Mechanics**2.1 General**

| | | |
|---|---|--|
| Width | 120 mm | |
| Height | 120 mm | |
| Depth | 38,0 mm | |
| Diameter | 0,0 mm | |
| Weight | 0,275 kg | |
| Housing material | Plastic | |
| Impeller material | Plastic | |
| Max. torque when mounted across both mounting flanges | wire outlet corner: 50 Ncm remaining corners: 80 Ncm | |
| Screw size | ISO 4762 - M4 degreased, without an additional brace and without washer | |

2.2 Connections

| | | |
|-----------------------|-------------|--|
| Electrical connection | Plug | |
| Length of lead wire | see drawing | |
| Tolerance | | |
| Length of tube | see drawing | |
| Tolerance | | |
| Wire gauge (AWG) | | |
| Insulation diameter | | |
| Plug | see drawing | |
| Contact | see drawing | |



3 Operating Data

3.1 Operating Data - Electrical Interface - Input

External voltage supply for input and output signals must be SELV conform.

3.2 Electrical Operating Data

| Features | Condition | Symbol | Values | | |
|--------------------------------|----------------|--------|--------|--------------------------|--|
| Voltage range | $\Delta p = 0$ | U | | | |
| Nominal voltage | $\Delta p = 0$ | U_N | | 230 V | |
| Frequency | $\Delta p = 0$ | f | | 50 Hz | |
| Power consumption Tolerance | $\Delta p = 0$ | P | | 1,7 W +- 20,0 % | |
| Speed Tolerance | $\Delta p = 0$ | n | | 1.850 1/min +- 10,0 % | |

3.3 Operating Data - Electrical Interface -Output

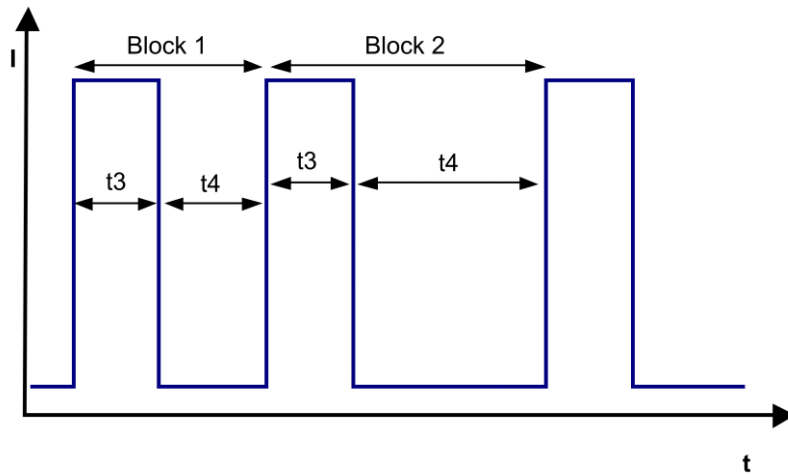
External voltage supply for input and output signals must be SELV conform.

| | |
|------------|------|
| Tacho type | None |
|------------|------|

| | |
|------------|------|
| Alarm type | None |
|------------|------|

3.4 Electrical Features

| | | |
|------------------------------------|--------------------------|--|
| Electronic function | Speed-Controlled | |
| Locked rotor protection | Auto restart | |
| Clock signal t3/t4 at locked rotor | Typical: 0,25 s / 10,0 s | |



3.5 Aerodynamic

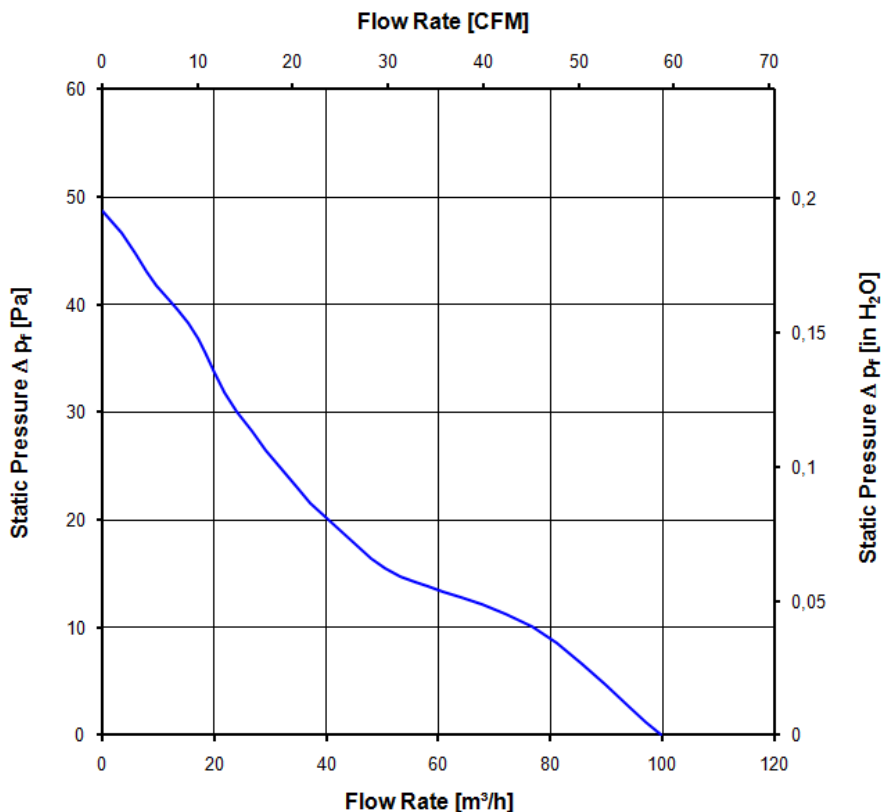
Measurement conditions: Measured with a double chamber intake rig acc. to DIN EN ISO 5801. Normal air density = 1,2 kg/m³; Temperature 23°C +/- 3°C; In the intake and outlet area should not be any solid obstruction within 0,5 m. The information is only valid under the specified test conditions and may be changed by the installation conditions. If there are deviations from the standard test conditions, the characteristic values must be checked under the installed conditions.

a) Operation condition:
 1.850 1/min at free air flow Frequency: 50 Hz Nominal voltage: 230 V

| | |
|---|-------------------------|
| Max. free-air flow ($\Delta p = 0 / \dot{V} = \text{max.}$) | 100,0 m ³ /h |
| Max. static pressure ($\Delta p = \text{max.} / \dot{V} = 0$) | 48 Pa |

b) Operation condition:
 at free air flow Frequency: Nominal voltage:

| | |
|---|--|
| Max. free-air flow ($\Delta p = 0 / \dot{V} = \text{max.}$) | |
| Max. static pressure ($\Delta p = \text{max.} / \dot{V} = 0$) | |



3.6 Sound Data

Measurement conditions: Sound pressure level: 1 Meter distance between microphone and the air intake.
 Sound power level: Acc. to DIN 45635 part 38 (ISO 10302)
 Measured in a semianchoic chamber with a background noise level of $L_p(A) < 5 \text{ dB}(A)$
 For further measurement conditions see section 3.4

a) Operation condition: 1.850 1/min at free air flow Frequency: 50 Hz Nominal voltage: 230 V

| | | |
|---|------------------|--|
| Optimal operating point | 84,0 m3/h @ 7 Pa | |
| Sound power level at the optimal operating point | 4,1 bel(A) | |
| Sound pressure level at free air flow, measured in rubber bands | 25,0 dB(A) | |

b) Operation condition: at free air flow Frequency: Nominal voltage:

| | | |
|---|--|--|
| Optimal operating point | | |
| Sound power level at the optimal operating point | | |
| Sound pressure level at free air flow, measured in rubber bands | | |

4 Environment

4.1 General

| | | |
|--|--------|--|
| Min. permitted ambient temperature TU min. | -20 °C | |
| Max. permitted ambient temperature TU max. | 75 °C | |
| Min. permitted storage temperature TL min. | -40 °C | |
| Max. permitted storage temperature TL max. | 80 °C | |

4.2 Climatic requirements*)

| | | |
|--------------------------|--|--|
| Humidity requirements | humid heat, cyclic; according to DIN EN 60068-2-30, 6 cycle | |
| Water exposure | None | |
| Radiation exposure | None | |
| Dust requirements | Dust check; according to DIN EN 60068-2-68, 6g/m2d, 1 day | |
| Salt fog requirements | None | |
| Harmful gas requirements | None | |

*) Permitted application area:

The product is for the use in sheltered rooms with limited controlled temperature. Occasionally condensed water is allowed. Direct exposure to water must be avoided. Saline ambient conditions must be avoided.

Pollution degree 2 (according DIN EN 60664-1)

It occurs only non-conductive pollution. Occasionally, temporary conductivity caused by condensation occurs.

5 Safety

5.1 Electrical Safety

A verification of thermal conditions (normal and abnormal operation) as well as the protection against electric shock, ingress of solid foreign objects and water has to be done in conjunction with the appliance.

| | |
|---------------------------|--------------|
| Test voltage HV type test | 3000 V |
| Unit test voltage | VAC |
| Time type test HV | 1 s |
| Insulation resistance | RI > 10 MOhm |
| Protection class | built-in fan |

5.2 Approval Tests

| | | |
|-----|---|-----|
| CE | EC Declaration of Conformity | Yes |
| EAC | Eurasian Conformity | Yes |
| UL | Underwriters Laboratories | Yes |
| VDE | Association for Electrical, Electronic and Information Technologies | Yes |
| CSA | Canadian Standards Association | Yes |
| CCC | China Compulsory Certification | Yes |

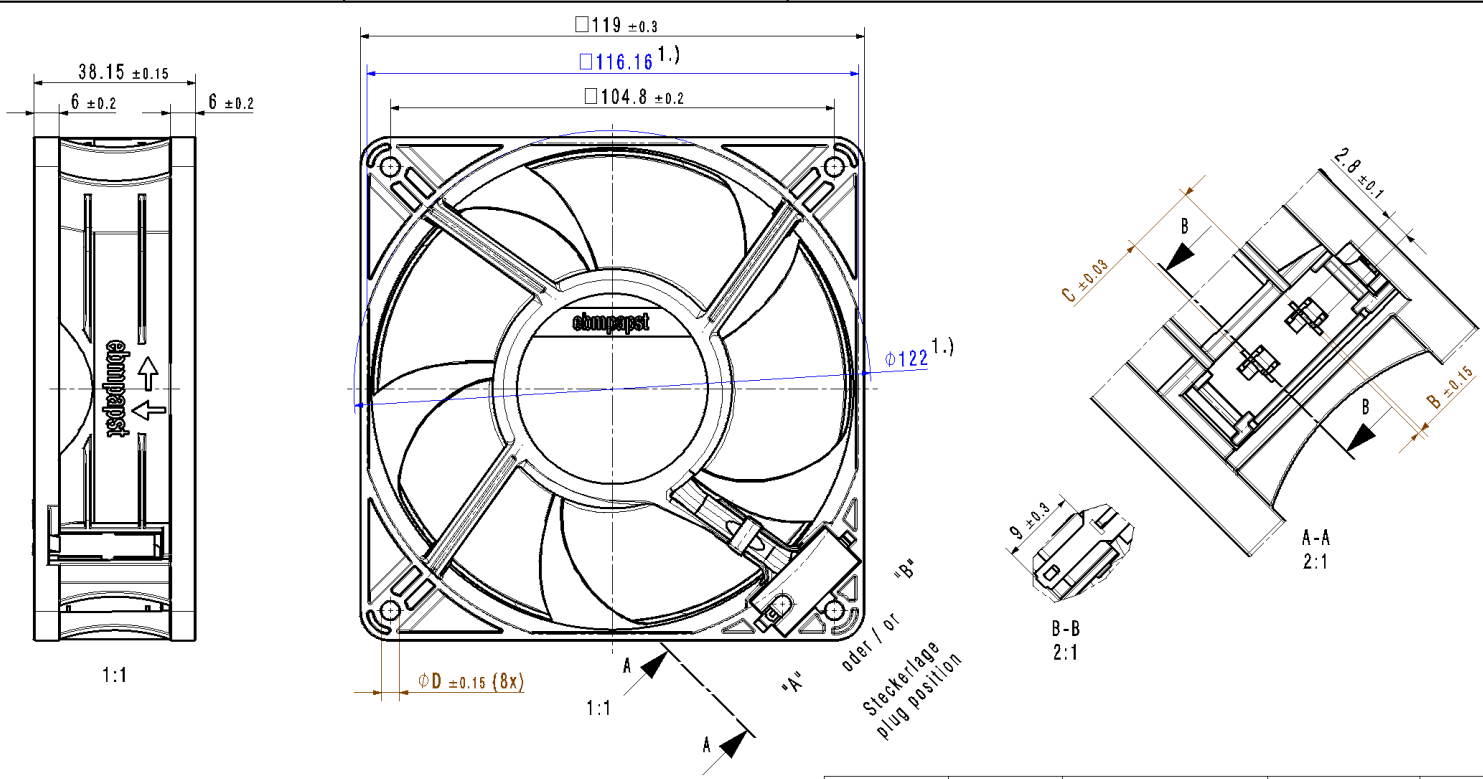
6 Reliability

6.1 General

| | | |
|--|-----------|--|
| Life expectancy L10 at TU = 40 °C | 65.000 h | |
| Life expectancy L10 at TU max. | 30.000 h | |
| Life expectancy L10 Delta (40 °C) | 130.000 h | |
| Life expectancy L10 acc. to IPC 9591 at TU = 40 °C | 110.000 h | |

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 reproduction without express authority. Drawings are liable to the payment of damages. All rights are reserved
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Schutzrecht nach DIN ISO 10110:2008 /
 Refer to protection notice 001 208 10016 /



1.) Maße für Montagewand
 1.) dimension for worktop mounting
 - Kein Axialspiel bei Kugellager durch Federausgleich
 no axial clearance of ball bearings conditional in a pre-load spring

| Erzeugnis-Nr. product-no. | Typ model | Befestigungsbohrung \emptyset mounting hole \emptyset D | Steckermasse plug dimension B / C | Steckerlage plug position "A" / "B" |
|------------------------------|--------------|---|---|---|
| 9203509001 | ACi 4420 HH | 4.3 | 0.5 / 8.5 | "A" |
| 9203509101 | ACi 4410 HH | 4.3 | 0.5 / 8.5 | " A " |

(A)

| | | | | | |
|---|-------------------------|--|----------------------------------|------------------------|---|
| SP-Status/State | Änd.-Nr./ Change-no. | CAD-System-Version/ CAD-system-version | CAD-Umgebung/ CAD-Environment | Werkstoff / Material: | Volumen / Volume (cm ³): |
| 920904001 0PR00A 3D-Referenzmodell / 3D-Referencemodel Datum Name | | | | Artikel / Title: | Gewicht / Mass (g): |
| Tolerierung / Tolerances: | | Bepr./ Print: Allg./allg.: Bespr./ Check: Freig./ Release: | | Zchg.-Nr./ Drawing No: | Ers.-f.Zshq. / Replace: |
| ebmpapst ebm-papst St.Gertraud GmbH & Co KG | | Dokumenttyp / Type of Document | Teilnummer / (Part/Tag) | Index / Index | Format / Size: Maßstab/Scale |

max. 370 m³/h

Energy-saving axial fans

Ø 130 mm



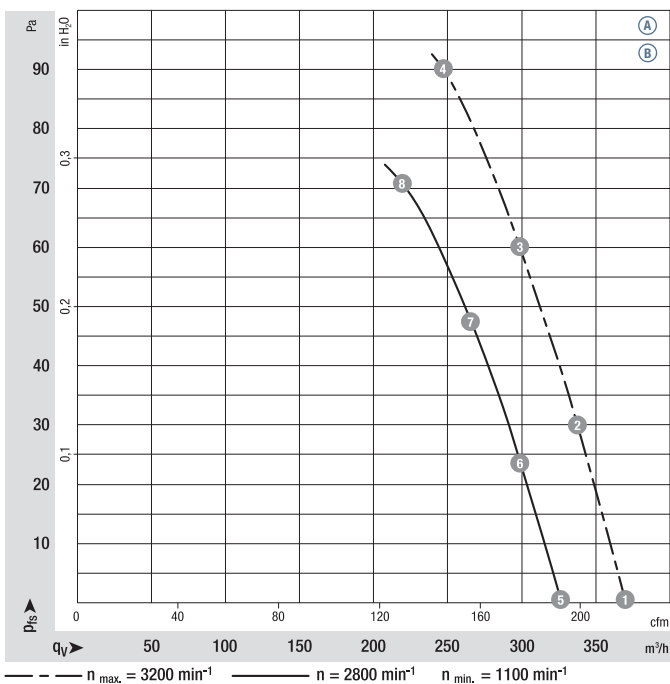
- **Material:** Wall ring: Plastic PP, fibreglass-reinforced
Blades: Plastic PA, fibreglass-reinforced
- **Number of blades:** 7
- **Direction of air flow:** "V", exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 54
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Operation mode:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

| Nominal data | | Curve | Nominal voltage | Frequency | Speed / rpm ⁽¹⁾ | Max. input power ⁽¹⁾ | Max. current draw ⁽¹⁾ | Max. back-pressure | Perm. amb. temp. | Mass | Electrical connections |
|------------------------|-----------|---------|-----------------|-----------|----------------------------|---------------------------------|----------------------------------|--------------------|------------------|--------------|------------------------|
| Type | Motor | VAC | Hz | rpm | W | A | Pa | °C | kg | | |
| W1G130-AA49 -01 | M1G055-AI | Ⓐ 1~115 | 50/60 | 3200 | 24 | 0,38 | 90 | -30..+60 | 0,75 | p. 259 / J7) | |
| W1G130-AA25 -01 | M1G055-AI | Ⓑ 1~230 | 50/60 | 3200 | 24 | 0,19 | 90 | -30..+70 | 0,75 | p. 259 / J7) | |

Subject to alternations

⁽¹⁾ Nominal data in operating point with maximum load and 115 or 230 VAC

Curve:



| | n rpm | P _{ed} W | I A | L _{WA} dB(A) |
|-----|-------|-------------------|------|-----------------------|
| Ⓐ 1 | 3200 | 23 | 0,38 | 63 |
| Ⓐ 2 | 3200 | 24 | 0,38 | 61 |
| Ⓐ 3 | 3200 | 24 | 0,38 | 60 |
| Ⓐ 4 | 3200 | 24 | 0,38 | 63 |
| Ⓐ 5 | 2800 | 16 | 0,26 | 60 |
| Ⓐ 6 | 2800 | 16 | 0,26 | 58 |
| Ⓐ 7 | 2800 | 16 | 0,26 | 57 |
| Ⓐ 8 | 2800 | 16 | 0,26 | 60 |
| Ⓑ 1 | 3200 | 23 | 0,19 | 63 |
| Ⓑ 2 | 3200 | 24 | 0,19 | 61 |
| Ⓑ 3 | 3200 | 24 | 0,19 | 60 |
| Ⓑ 4 | 3200 | 24 | 0,19 | 63 |
| Ⓑ 5 | 2800 | 16 | 0,13 | 60 |
| Ⓑ 6 | 2800 | 16 | 0,13 | 58 |
| Ⓑ 7 | 2800 | 16 | 0,13 | 57 |
| Ⓑ 8 | 2800 | 16 | 0,13 | 60 |

Air performance measured as per: ISO 5801, Installation category A, with ebm-papst inlet nozzle without protection against accidental contact. Suction-side noise levels: L_{WA} as per ISO 13347, L_{pA} measured at 1 m distance to fan axis. The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation. With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted! For detailed information see <http://www.ebmpapst.com/general-conditions>

max. 370 m³/h

Energy-saving axial fans

Ø 130 mm



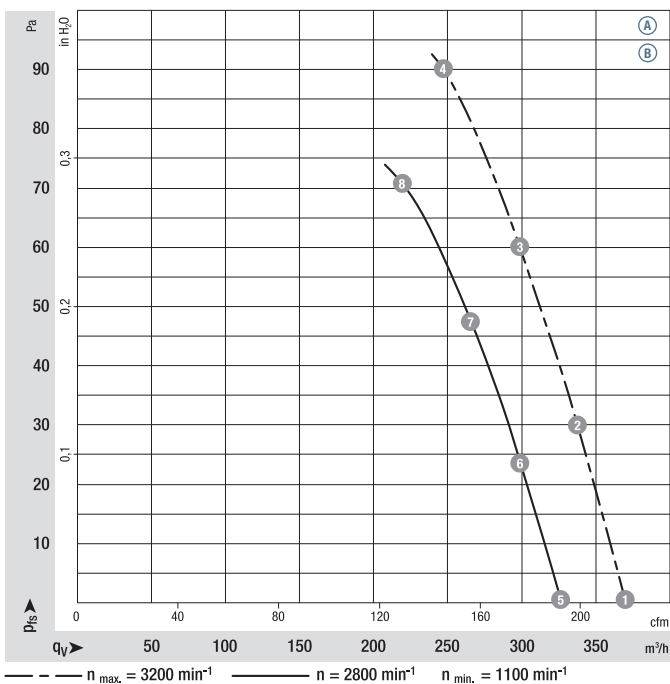
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Blades: Plastic PA, fibreglass-reinforced
- **Number of blades:** 7
- **Direction of air flow:** "V", exhaust over struts
- **Direction of rotation:** Counter-clockwise, seen on rotor
- **Type of protection:** IP 54
- **Insulation class:** "B"
- **Mounting position:** Any
- **Condensate discharges:** None
- **Operation mode:** Continuous operation (S1)
- **Bearings:** Maintenance-free ball bearings

| Nominal data | | Curve | Nominal voltage | Frequency | Speed / rpm ⁽¹⁾ | Max. input power ⁽¹⁾ | Max. current draw ⁽¹⁾ | Max. back-pressure | Perm. amb. temp. | Mass | Electrical connections |
|------------------------|-----------|---------|-----------------|-----------|----------------------------|---------------------------------|----------------------------------|--------------------|------------------|--------------|------------------------|
| Type | Motor | VAC | Hz | rpm | W | A | Pa | °C | kg | | |
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| W1G130-AA25 -01 | M1G055-AI | Ⓑ 1~230 | 50/60 | 3200 | 24 | 0,19 | 90 | -30..+70 | 0,75 | p. 259 / J7) | |

Subject to alternations

⁽¹⁾ Nominal data in operating point with maximum load and 115 or 230 VAC

Curve:



Air performance measured as per: ISO 5801, Installation category A, with ebm-papst inlet nozzle without protection against accidental contact. Suction-side noise levels: L_{WA} as per ISO 13347, L_{pA} measured at 1 m distance to fan axis. The acoustic values given are only valid under the measurement conditions listed and may vary depending on the installation situation. With any deviation to the standard setup, the specific values have to be checked and reviewed once installed or fitted! For detailed information see http://www.ebmpapst.com/general_conditions

| | n rpm | P _{ed} W | I A | L _{WA} dB(A) |
|-----|-------|-------------------|------|-----------------------|
| Ⓐ 1 | 3200 | 23 | 0,38 | 63 |
| Ⓐ 2 | 3200 | 24 | 0,38 | 61 |
| Ⓐ 3 | 3200 | 24 | 0,38 | 60 |
| Ⓐ 4 | 3200 | 24 | 0,38 | 63 |
| Ⓐ 5 | 2800 | 16 | 0,26 | 60 |
| Ⓐ 6 | 2800 | 16 | 0,26 | 58 |
| Ⓐ 7 | 2800 | 16 | 0,26 | 57 |
| Ⓐ 8 | 2800 | 16 | 0,26 | 60 |
| Ⓑ 1 | 3200 | 23 | 0,19 | 63 |
| Ⓑ 2 | 3200 | 24 | 0,19 | 61 |
| Ⓑ 3 | 3200 | 24 | 0,19 | 60 |
| Ⓑ 4 | 3200 | 24 | 0,19 | 63 |
| Ⓑ 5 | 2800 | 16 | 0,13 | 60 |
| Ⓑ 6 | 2800 | 16 | 0,13 | 58 |
| Ⓑ 7 | 2800 | 16 | 0,13 | 57 |
| Ⓑ 8 | 2800 | 16 | 0,13 | 60 |